Shyam Sivasubramanian

U.S Citizen | 774-214-8755 | sivasubr@purdue.edu | linkedin.com/in/shyamsiv | github.com/Shyam-Sivasubramanian

Education

Purdue University West Lafayette, IN

Bachelor of Science in Computer Science and Data Science *Aug. 2023 – May 2027*

Relevant Coursework:

- Discrete Math and Data Structures and Algorithms
- Data Science and Statistics using R and Python
- Linear Algebra and Calculus

Technical Skills

Programming Languages: Java, R, Python, C, C++, Assembly, SQL, GLSL, HTML, CSS, JavaScript
Tools & Libraries: Mediapipe, Scikit-Learn, OpenCV, Pandas, Numpy, Virtual Reality, Plotnine, Statsmodels, Stable Baselines 3, PyTorch, Git, CLI, Linux, ROS, OpenGL

Experience

Researcher Aug. 2024 – Present

Purdue CoMMA Lab

- Created and deployed scripts on robot manipulators to detect and avoid collisions in real time using computer vision.
- Worked with Virtual Reality (VR) technology to control robot manipulators with integrated collision detection.
- Improving **Foam**: an automated mesh simplification tool for faster computation on robot manipulators.

Data Science Intern May 2025 – Aug. 2025

Karyon.bio

- Built classification models using Pandas and Statsmodels to detect fatty liver disease, diabetes, cervical and breast cancer from medical scans.
- Visualized performance and patient likelihood outcomes with Plotnine.

Web Developer Feb. 2025 – Jun. 2025

The Purdue Rivet

- Developed a website using HTML, CSS, and JavaScript for Purdue's student-run publication.

Staff Photographer, Graphics Artist Aug. 2023 – Present

The Purdue Exponent

- Photographed and designed artwork to add context to Purdue's student newspaper stories.

Research Assistant Jun. 2022 – Aug. 2022

The Robotics Institute, Carnegie Mellon University

- Developed test scripts for reinforcement learning research in robotics.
- Conducted robot simulations to validate and improve algorithm performance.

Intern Jun. 2022 – Aug. 2022

Biohaven Pharmaceuticals

- Analyzed clinical trial data for neurological drugs using R, ensuring accurate reporting.
- Assisted with technical issues in data collection and data corruption.

Projects

Minesweeper Auto Solver | *HTML, CSS, JavaScript* Jul. 2025

- Generated Minesweeper puzzles and implemented an algorithmic solver with hierarchical reasoning.
- Built a web-based interface using HTML, CSS, and JavaScript.

DeepRow | *Python, Scikit-Learn, Numpy, OpenCV, MediaPipe* May 2023

- Quantified rowing form using computer vision and pose estimation data from professional athletes.
- Trained and classified form with a Random Forest Classifier.

Shader Study | *GLSL, OpenGL* Jun. 2024

- Created generative art pieces based on multivariable calculus and animation.
- Learned advanced concepts in graphics programming and shader design.